

MAN AND MACHINES History and Technology

The members of the new colony who sought intellectual stimulation from one another at meetings of the Philosophical Society were interested in, and presented papers on, a wide range of subjects, including the technology of the day. William Pettigrew, one of the mechanically minded members, spoke on

drainage, shipbuilding, railways and timber, usually illustrated by models. Charles Tiffin, colonial architect responsible for the first Brisbane Hospital building on its present site, gave an important paper on earth closets—one then on trial at the hospital he had designed himself. John Waugh, a medical practitioner spoke on spectrum analysis with a demonstration of his spectroscope; James Thorpe spoke on meteorology; and William Brookes on cotton growing in Queensland<sup>1</sup>. However, this interest in technology did not extend to the collection of objects of a technological nature. With the exception only of the microscope donated by Tiffin and some stereoscopic photographs donated by Daintree, the society's collection consisted solely of natural history items. The first permanent staff member, Custodian Karl Staiger was also the government analytical chemist, but although he gave several papers on technological subjects as a member of the Philosophical Society he does not appear to have seen the museum in the context of technology. The staff members who succeeded Staiger were geologists and zoologists and the emphasis on natural history collections persisted - an emphasis that was reinforced in 1910 in the report to the premier by Robert Etheridge jnr, director of the Australian Museum in Sydney<sup>2</sup>.

## Curios, Machinery, Weapons and Furniture

As early as April 1881, the board of trustees had decided to press the government to allocate funds for a technological branch of the museum, but nothing further seems to have happened at that time, By 1884 there was no space:

There are many subjects of public interest which the Museum fails to illustrate for want of room. Mining appliances and processes, metallurgy, chemistry and its trade products, raw and manufactured materials of food and clothing, building materials, textiles and textile materials and wares—these with others should be sufficiently represented to assist in the rise and progress of colonial industries but they demand space<sup>3</sup>.

Nevertheless, the shortage of space did not affect the expansion of the zoological, geological and ethnographic collections. Lack of space was a rationalisation—the excuse given for the fact that the development of technology collections was low on the list of priorities for the museum. Despite this, technological and historical items were gradually being acquired.

The first technological items in the collection came in 1873, from Richard Daintree. As government geologist for north Queensland he had gained a wide knowledge of the geology and the potential for mining. When he became agent general for Queensland in London he helped to promote mining development in Queensland by sending to the museum five cases of models of mining equipment then in use in the Cornish tin mines.

The next reference to items of historical and technological relevance occurs in the earliest surviving complete inventory of the collection, carried out in 1876 for the board of trustees. Among the mineral and natural history specimens listed there is a single section entitled 'Curios, Machinery, Weapons and Furniture', which lists 36 objects belonging to

Previous page: Attendant Len Taylor, with Bert Hinkler's AVRO Baby before its restoration by the Queensland Aero Club (photograph by courtesy the Couner Mail).

the areas now covered by the history and technology section. The first two, a pair of 'Hindoo' bracelets and an English knitting sheath, are still in the collection. Some of the others lack sufficient description to allow certain identification. An ivory Chinese pagoda donated by Mrs J. Stephenson in September 1883<sup>6</sup> is also still in the collection and has featured in various displays over the years. An additional Chinese item was acquired in April 1898 when the board made one of its few purchases for the history collection—a Chinese mandarin's suit from Captain W.H. Blake for £5. Over the next few years Captain Blake provided the museum with further interesting examples of Chinese crafts and items collected during the Boxer rebellion.

In 1887 a fine donation of ancient pottery and glassware, collected in Cyprus by Mr S. Brown, a member of the British team excavating there, had been presented to the museum by his sister, Iris Brown. Seeking a



On display on the verandah of the museum in 1922; Mary Watson's water tank, in which she, her baby and a Chinese servant fled from Lizard Island.







Mephisto, World War I German Tank A7V Kampfwagen. Above: at Vaux, France, after its capture; centre: arriving in Brisbane; below: hauled into the museum grounds by two City Council steam rollers in 1919.

better representation of the material being excavated in the Middle East, Director de Vis wrote to the director of excavations, Beni Assan, in April 1904, applying for a share in the distribution of Egyptian antiquities? A promise was received that the museum would share in future finds. Shortly after, a collection of Egyptian pottery was received, although whether or not it was in response to the initial request is not known. It was excavated at Esna and Hierakonopolis for the University of Liverpool by John Garstang, and accessioned, without description, in the donor register as D 72673, dated 21 August 1905. Subsequently, this Egyptian material was mistakenly reaccessioned with the Cypriote items donated in 1887. It was not until 1981, when an inquiry was received from the Department of Egyptology at University College, London, that the mistake was discovered and the two collections were once again correctly attributed.

Although much of the material added to the collections at this time was donated, the director and the board did make some effort to develop the museum's technological and history collections. However the nature of many of the items acquired—donations as well as those that the museum bought—suggests that Australians did not regard their own artefacts as particularly interesting or significant, while objects from the Orient and from archaeological sites in the Middle East did excite their curiosity and interest, Further, apparently Queensland was seen in the context of an English colony and, in the first instance, the trustees invariably sought help from the great museums in London. At this time the museum's role was regarded as primarily educational rather than archival.

Toward a Technological Branch

In 1880 the new curator, W.A. Haswell, corresponded with the colonial secretary proposing that measures be taken to obtain specimens (in England) for a technological branch of the museum. However, with Haswell's resignation at the end of that year the proposal lapsed for several years. Haswell's successor, de Vis, had developed some technology exhibits for the Manchester Natural History Museum before he came to Australia, and he set about developing similar displays in Queensland. He obtained samples of local wool for the proposed technological branch, and he had some success in persuading the board to further actions. de Vis' influence can be seen in the board minutes of 7 November 1882:

In view of the importance of establishing a technological branch of the Museum it is suggested that application be made to the Science and Art Department, South Kensington, for a grant of the publications issued by it, also of such illustrations of the materials, constituents and adulterations of food and of the components of the body as it may be disposed to offer.

Again the response to the request took some time. In July 1885 the board requested that details be obtained of progress in forming the food and adulteration collection—three years after the initial request <sup>10</sup>. By April 1886 the curator was able to report that a food collection was being prepared in London for the museum. It finally arrived in 1887 <sup>11</sup>.

In June 1886 a W.A. Allen contacted the museum offering help in the formation of a technical museum. At the board meeting at which the offer was considered the following statement of intent was made ": 'Provision having already been made for a food collection, it is thought advisable to add a collection of drugs and other objects of technical interest which might be transferred to a Technical Museum if such should at any time be established'. This is the first comment from the board on the possibility of

a separate technology museum. At the same meeting the curator was authorised to procure photographic apparatus for the museum for research

During 1888 the museum arranged to obtain standards of weight and volume through the agent general in London <sup>13</sup> and it maintained responsibility, in Queensland, for weights and measures for many years after.

There was only a small amount of Australian material received during these early years. In 1887 Elizabeth Coxen presented a portrait of her husband, Charles Coxen, founding father of the museum. At the end of 1888 a significant addition to the small technology collection, the model of the Queensland government's new steam yacht, *Lucinda*, was placed on display <sup>14</sup>. A model of cattle station yards, prepared by Mr F.A. Blackman, was on display at the museum briefly, before shipment to London for the Colonial and Indian Exhibition in 1886. In April the next year, Mr Blackman donated the yards, now safely returned from England, to the museum where they have been regularly displayed ever since. Blackman became a member of the museum board of trustees in 1891.

In the museum board's annual report for 1888 Curator de Vis once again referred to the view that lack of space prevented development of the technology collections. de Vis stated 'the proposal to establish a technological department must remain in abeyance from sheer want of space'. This was the last mention of the possibility of a technological section for some time, as the state moved into a period of severe financial depression in the 1890s. The application of technology to the museum's general operation continued, however, with approval for the curator to purchase a typewriter in October 1892.

In December 1894, in another effort to improve the technological collections, the curator requested, through the agent general in London, specimens of porcelain products from Sir H. Doulton & Co. <sup>15</sup>. A competitor for items that were of interest to the museum now appeared. At the same board meeting, in April 1895 at which a favourable response from Doulton and Co. was received, it was reported that—

The AVRO Avian Cirrus flown on the first solo flight from England to Australia by Bert Hinkler. Acquired by the museum in 1929.



By order of the Colonial Secretary, issued with the consent of the Secretary for Public Instruction, the portrait of the Queen, the bust of Justice Mein and the vase of Doulton Ware herefore in the Museum had been removed to the National Art Gallery, no letter of request or of acknowledgement having been received <sup>16</sup>.

C.S. Mein, had been a prominent member of the Philosophical Society from 1869. As minister for Public Works he had supported the moves for a museum building and when that failed had appointed Coxen honorary curator in 1871. Since this was the event that signalled the government's commitment to the museum, C.S. Mein could be said to one of the more significant people in its history. The bust of Mein was therefore an artefact that was of particular relevance to the museum's collection. Although the trustees received an apology, the items stayed in the art gallery. Overlap of interest in the area of decorative and applied arts between the



The AVRO *Avian Cirrus* on display in the Exhibition building from 1929 until the museum closed in November 1985.

Queensland Museum and the Queensland Art Gallery had begun and has continued over the years, though generally on more amicable terms than those of this inauspicious beginning.

In fact, in 1930, the Queensland Art Gallery moved into the concert hall section of the Exhibition building in Gregory Terrace. For the next 44 years it was the close neighbour of its sister institution, the museum — by then installed in the exhibition hall and basement of the same building. That the institutions co-operated well is illustrated in a remarkable incident that resulted from the vigilance exercised by the museum's chief preparator, D.P. Vernon, and culminated in the art gallery's acquisition of one of the state's most treasured works of art 17. Vernon found, in the basement of the museum, a beautiful red wax, bas-relief sculpture, glazed and in a gilded, though shabby frame. On it, a pencilled note, possibly of Longman's—the director from 1918 to 1945—read: 'cf. Bologna Italian late 16th century'. Mack, the director at the time, received advice that the sculpture was not of any importance. However, Vernon's belief in the pencilled attribution persisted. He cared for the sculpture, and eventually, in 1965, the director of the art gallery discovered, following correspondence with the Victoria and Albert Museum, that Vernon was right. It was, indeed, the lost model called The Flagellation of Christ



One of the treasures from the Queensland Museum's horological collection, a bracket clock by the great clock maker Thomas Tompion, London, it was made in the early 18th century and presented to the museum in 1954 by Mrs. A.H. Marks.

created by Giovanni de Bologna, a contemporary of Michelangelo. Originally it was one of six wax models that were later cast in bronze for the Grimaldi Chapel in Genoa. The sculpture was presented by the director, J.T. Woods, on behalf of the museum, to Sir Leon Trout who received it on behalf of the art gallery on 1 December 1965.

Following the move of the museum to the Exhibition building during 1900 the curator's report of January 1901 detailed the layout of displays. His comment that 'Our industrial materials are not represented as such in any way' gives an indication of the museum's lack of success in building up a satisfactory collection for its intended technological branch in spite of the avowed intention, expressed repeatedly over the years, to do so. Despite this overall failure many significant items were preserved through the museum's effort during the latter part of the 19th century. With the move into the new building and the 20th century things did not improve markedly.

In August 1903 a number of manufacturers' samples, collected in England by the agent general, were displayed at the National Association Show by the Geological Survey Department <sup>18</sup>. These items were suggested as forming a good beginning for an industrial department of the museum. The question of soliciting more items was raised at a board meeting in the expectation that the concert hall space in the new premises would be handed to the museum in a few months <sup>19</sup>. Neither happened.

Soon after Hamlyn-Harris took over as director in 1910 he initiated a new series of collection registers, including the A register, which started on 25 February 1911. This register included many of the items of history and technology in the collection, as well as archival and photographic items that had previously been recorded in the donor registers, or had not been recorded at all. Oddly, it also included natural curios such as the inevitable two headed chickens beloved of early museum visitors. Thus, although the A register is not an entirely reliable guide to the rate of increase in historical and technological collections, it does give some indication of their growth. At the end of its use in August 1966 number A4519 was the final entry. The rate of growth of the collections had been very slow indeed and there is, regrettably, no evidence that Hamlyn-Harris applied the same diligence to the historical and technological collections as that which he had so successfully brought to bear on the collections in zoology, geology and anthropology.

In 1882 the museum had obtained a typewriter; and in 1886 photographic equipment. The telephone, introduced to Brisbane in 1880, was connected to the museum in 1885. The museum's failure to develop technology collections during these early years is surprising when at the same time it was so quick to use new technology for research and administration.

Elsewhere in Australia, the Industrial and Technological Museum (later the Science Museum) was founded in Victoria in 1870, taking over the mining and agricultural collections from the National Museum of Victoria. The Museum of Applied Arts and Sciences in Sydney was founded in 1880 as a result of interest created by the international exhibition staged there in 1879<sup>31-2</sup>, Brisbane's own small international exhibition, in the Exhibition building in Bowen Park already under consideration as a home for the museum, was not held until 1897<sup>23</sup>, and did not provide the stimulus for any significant change in the collecting interests of the museum.

The emphasis on primary production, and the lack of development

of significant secondary industry also contributed to lack of interest in technology collections, compared with Sydney and Melbourne. The Industrial and Technological Museum in Victoria was heavily oriented towards educating the population to develop local industries <sup>22</sup>. The founding of the University of Queensland in 1909 lessened the likelihood of the museum being able to build up technology collections for use in education; while the Royal Historical Society at Newstead House, rather than the museum, acquired many of the items significant in early exploration and settlement of the state.

Heber Longman, in taking over as director in 1917, sought to redress this situation. In 1918 he appealed to both the Royal Historical Society<sup>24</sup> and the University of Queensland<sup>25</sup>: 'With a view to building up a distinct section of historical objects with local associations, I am endeavouring to supplement the few specimens of this nature now in the Queensland Museum. Any assistance by your society would be appreciated'. The rate of growth of the collections following this appeal does not indicate that there was any dramatic response to it. However, during Longman's time as director the two most important items currently in the museum's technology collections were acquired. These were the World War I German A7V fighting tank *Mephisto*, and Bert Hinkler's famous AVRO *Avian*, in which he completed the first solo flight from England to Australia. These two items are now firmly associated with the museum.

It was a minor accident to the AVRO Avian that ensured its preservation in Queensland. The under carriage had been damaged in a heavy landing at Hinkler Park, Bundaberg, in September 1928. While Hinkler was waiting for it to be repaired he received an attractive flying offer from an aircraft manufacturer in England. Although he would have preferred to fly back to England, there was a possibility of a long wait before the Avian could be repaired and a maritime strike forced him to a quick decision to go by sea—taking one of the last boats to leave Australia before it became isolated by the strike. He left the Avian with his family in Bundaberg until, early in 1929, he offered it to the Queensland government with the hope that it would be of educational value to young Queenslanders. It was a generous gesture—the plane was costly for Hinkler to replace—made in appreciation of the public's interest and support. QANTAS staff carried out minor repairs on the plane, and transported it to Brisbane where it was exhibited at the annual RNA show of 1929. It was then moved into the museum, where it was displayed, suspended in a flying position, until 29 January 1986 when it was lowered in preparation for the move to South Brisbane

The museum also holds what is thought to be the sextant belonging to Edmund Kennedy, the leader of the ill-fated expedition to Cape York in 1848. In an attempt to retrieve the expedition's equipment, a party led by a Captain Simpson subsequently returned to the place on the Escape River where Kennedy had been speared by Aborigines. There, on searching under a bush among the leaves, the horizon glass of a sextant was found<sup>26</sup>. In 28 January 1937 an article in the *Courier Mail* recounted how a party surveying for stock routes had come across further relics of Kennedy's expedition. Perhaps it was this reminder that resulted, some two months later, in the museum receiving a parcel containing an ebony sextant—its horizon glass missing, a sailor's jacknife, a shell ornament and an Aboriginal dilly bag. There was neither a message nor a return address either on or in the parcel. At about the same time Director Longman, received a letter from an A.R. Meldrum, a newsagent at Cooktown. It read:



Arnold Sweetser, technician in the museum 1966-74, a man of diverse skills.



The Commissariat Store in 1978.

Mr.M. O'Shea has asked me to send you some information connected with the murder of Kennedy the explorer also some relic he has in connection with same <sup>27</sup>.

At first, Longman did not connect the parcel with the relic referred to in Meldrum's letter. He replied to the latter asking if O'Shea had any further information, referring him to Jack's account of the expedition of the expedition of the expedition of the parcel with the suitable for exhibition and the contents of the parcel were the supposed relics. I am assuming that the Sextant and Knife are specimens associated by Mr O'Shea with the Kennedy Expedition of the lasked where the objects had been found, but did not receive a reply. Then, in September, four months later, Professor Richards of the University of Queensland forwarded a letter from Cndr T.F. Roberts who was involved with a nautical survey on Cape York Peninsula for the Department of Harbours and Marine. Roberts wrote:

An old boot-maker joined the ship in Cooktown and spun me the following yarn. Many years ago he was prospecting up the Pascoe River and came across some nomad blacks, one of whom (an old gin) had a sextant in her dilly bag. He persuaded them to give him the instrument and firmly believed it had belonged to an explorer named Kennedy who was killed by blacks up in that country <sup>30</sup>.

Roberts went on to say that O'Shea had got Meldrum to parcel up the articles and send them to the museum; and he gave the address of O'Shea's son who later brought his father to Brisbane to see the articles on display in the museum. Longman said, in his letter of acknowledgement to O'Shea's son<sup>31</sup>, 'it is seldom that we receive historical specimens of such interest as these relics'.

Although it has not been possible to prove that the items are correctly attributed, the sextant is of the right age, its horizon glass is missing and T.F. Roberts, in 1985, recalled O'Shea's strong conviction that it had belonged to the explorer.

Another fine gift during Longman's term started the museum's horological collection. In 1919 the museum received, from the Victoria and Albert Museum, twelve watches and five watch movements from the 18th and 19th centuries, duplicate material from the collection of Evan Roberts. In 1954 there was another gift of four splendid clocks from Mrs A.H Marks on behalf of her late husband, Dr A.H. Marks. Two of these, a Thomas Tompion bracket clock and an Earnshaw chronometer, are of particular importance and mark the beginning of the recent growth of the collection.

## The Hall of Science Industry and Health

While there was organised community support for the museum in the days of the Philosophical Society only at one other time did this happen again. It began after World War II with the surge of interest in science and technology that occurred then. In about 1947 the idea of developing a technological museum in Brisbane was raised by the Queensland Electrical Institute—an organisation concerned with the proper training of those engaged in the electrical industry. The museum proposal was supported by a number of technical and professional organisations.<sup>12</sup>.

As a result a Committee for the Development of a Technical Museum was formed and in April 1949 a letter signed by J.S. Johnston as chairman of the committee was forwarded to Premier E.M. Hanlon MLA, urging that in parallel with the Queensland Museum there should be established a



Brisbane 1856. The Commissariat Store, built in 1829, is the building half way up the hill in the centre of the picture—partly obscured by the boat-builder's hut and store on the wharf. Today it is one of the two buildings of the convict era to survive (photograph by courtesy Oxley Library).



Ian Sanker, curator of industrial technology, and Michael Quinnell, curator of anthropology and archaeology working on the excavation of the Commissariat Store, 1979.



The brick-lined underground drains of the Commissariat Store.

'Museum of Science, Industry and Applied Arts'. Collecting material was not considered to be a problem, as much was already available, but accommodation and staffing obviously required state government funds.

The proposal was referred to the director-general of Education who supported the arguments for a technological museum, but the Public Service Commissioner's Department concluded that satisfactory accommodation was neither available nor in sight; further, at the time, suitably qualified staff would be difficult to obtain and such as were available were wanted by other government departments. The outcome was that 'the question will be reviewed by the Government on a more opportune occasion'.

The idea then seems to have lapsed until 1963 when two of the original supporters, I.O. Marsh a senior engineer with the City Electric Light Co. and John O'Hagan of the Red Cross Blood Bank, discussed with Professor S.A. Prentice of the University of Queensland the possibility of reopening the matter, but no plan of action emerged. However, a year later the graduates and students section of the Institution of Engineers Australia, Brisbane Division, included in the annual display of the Engineering Undergraduate Society a combination of old and new electrical apparatus.

This display received a deal of interest and early in 1965 the time seemed opportune to canvass a wide selection of the Queensland community to ascertain the extent of interest in development of the technological side of the museum. All relevant learned societies and similar bodies were included and, at a meeting in April at the University of Queensland, representatives of these interests agreed to the formation of a committee which adopted the name 'Queensland Hall of Science, Industry and Health Development Committee'. A council and an executive committee of the council were formed—the latter consisting of chairman S.A. Prentice, senior vice-chairman J.E. O'Hagan, junior vice-chairman I.O. Marsh, honorary treasurer C.F. Cottis, and acting honorary secretary L. Wager. The council represented a wide range of technical interests—agriculture, architecture, education, engineering, health, industry, science, veterinary science as well as the museum and the graduate students' section of the Institution of Engineers Australia, Brisbane Division.



Arnold Sweetser assesses the problems before collecting the Beam Engine from Lars Anderson's Sawmill at Esk, 1968.

A constitution was approved by the Department of Justice in 1966 and this included the appointment of three trustees to deal with property of the committee. The object of the committee was to work with the museum toward the development of a display hall of science, industry and health <sup>33</sup>. Accommodation for the desired development remained a problem. The Brisbane City Council's disused power house at New Farm was carefully studied as a possible solution and in 1970 the council of the Development Committee prepared a report, entitled 'Suggested Development of the Queensland Museum', on the intended development of that site. However, the estimated cost of building modifications to the power house was considered too great for the matter to be taken any further.

Thus, although displays in the museum resulted from these efforts, a separate Hall did not. Nevertheless, real development of the museum's activities in history and technology was initiated by the Queensland Hall of Science, Industry and Health Development Committee. In addition to raising public support, and being responsible for the addition of many important items of early technology to the museum's collections, the committee realised that the museum did not operate under legislation and it saw this as a serious drawback. It produced the first draft of what was to become The Queesland Museum Act 1970, which made provision for a board of trustees and defined the museum's charter in the broadest terms, with responsibilities for history and technology as well as natural history collections. Prentice, one of the driving forces behind the Hall of Science, Industry and Health, was an appropriate appointee to the reestablished board of trustees — for it was largely through his efforts that history and technology was to become a well recognised and well supported responsibility of the museum, and that the museum itself acquired a firm statutory base. In 1971 the Hall of Science, Industry and Health Development Committee became the Museum Society of Queensland; which, in 1985, became the Queensland Museum Association Incorporated—thus continuing in the supportive role of its predecessors (see Chapter 3).

## The Final Commitment

Meanwhile, in 1959, the museum had staged its first major display on the history of the state for the Queensland centenary celebrations. The display was a great success, and although many of the items had been loaned (some from Newstead House) it firmly established the museum as an authority on the state's history and its responsibility to maintain collections of material relevant to the history of Queensland was now recognised. From this time on the emphasis changed and acquisition of large collections of exotic items from China and the Mediterranean, already well preserved in museums throughout the world, were not actively sought for the museum's collections. In 1970 the museum was involved in another historical display for the bicentenary of Captain James Cook's voyage of discovery up the east coast of Australia. It also prepared and installed displays in the James Cook Museum in Cooktown for the National Trust of Queensland.

In 1966 the museum at last made a real commitment to the development of a history and technology section when it appointed Squadron Leader H.A. (Arnold) Sweetser, a retired airforce engineer, to the staff, with responsibility for reorganizing and actively expanding the collections in these areas. Items were sorted, researched and reaccessioned in the newly established historical and numismatic registers and additions to the collection were actively sought and acquired.





Errol Beutel (*left*), assistant in history and technology, helping Sweetser to assemble the restored beam engine in the museum grounds, 1973.



The museum's Garrett traction engine during its working life with the Normanby Shire Council at Harrisville in about 1920

Vernon recalls that on one occasion Sweetser was contacted by a member of the public wishing to know about telegraph insulators. The inquirer made an appointment to visit the museum the following week. Sweetser, meanwhile, read up all he could find on telegraph line insulators. Having done that he contacted the postmaster-general's office (responsible in those days for telephones) and, with his newly acquired knowledge, persuaded it to donate a collection of insulators. When the original inquirer called at the museum he was provided with all the information he needed.

Publicity for these new activities, together with Sweetser's enthusiasm and hard work, led to dramatic improvements in certain displays and new ones, showing glimpses of the state's historical and technological development, were fitted in wherever space was available in the galleries. Workshop facilities gradually improved to keep pace with the restoration and display programme. Eventually, the first curator for the section, D.J. Robinson, was appointed in 1972.

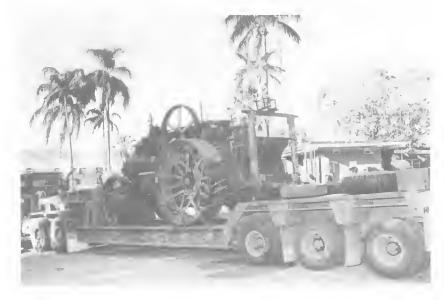
In 1974 I.G. Sanker was appointed curator of industrial technology and initiated involvement by the museum in historical and industrial archaeology in the state. This involves field studies of history and the local use of technology. The evidence sought are sites and material remains as well as documentary and pictorial records. Studies have included a convict building, industrial and mining sites, and a regional study of the industrial history of the Darling Downs.

The most important item added to the collections during Sweetser's tenure was an 1866 beam engine. Sweetser realized that a beam engine represented the most important type of early steam engine and he believed there was a chance that one might have survived in Queensland. His inquiries led him to an engineer who had done maintenance work on such an engine during the 1930s. Following up this lead, Sweetser located the engine in Lars Anderson's sawmill at Esk. The Anderson family donated the engine to the museum, and, through the efforts of the Queensland Hall of Science, Industry and Health Development Committee, it was collected and restored with the assistance of the Southern Electric Authority. The technological collection now includes many other important engines restored in the museum workshop by M. Schofield who succeeded Sweetser on his retirement in 1974. These items include a 1925 Republic truck; a 1919 Ransomes, Sims and Jefferies

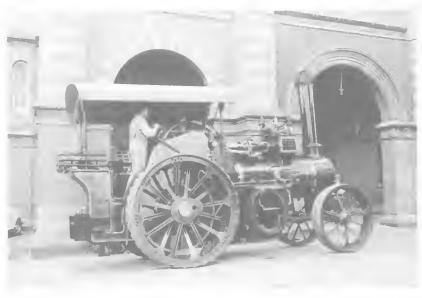
portable steam engine and boiler; a 1910 Tangye oil engine; a 1917 I.H. Mogul kerosene engine; an Ericsson hot air engine; a 1911 Garrett's 6 n.h.p. traction engine; and an Austral oil engine.

One technological area that has benefited from many local donors is the weapons collection; and the historical accession register records similar donations in the past. L.H. Maynard, an honorary collector appointed by Hamlyn-Harris, began the collection in 1912 with a large donation of 90 weapons. In 1936 E.F. Tristrom gave 45 and over the years the Marks family have donated more than 64. In addition, interesting collections of obsolete firearms have been transferred to the museum from the Comptroller General of Prisons and the CIB have handed on firearms confiscated and surrendered during amnesties. Perhaps the most diverse assortment of confiscated weapons, including such things as swordsticks, has come from the Customs Department.

Through the efforts of E. Wixted, the museum's librarian and a keen historian of aviation, the museum also acquired many items of aviation



The Garrett traction engine transported to the museum by the army, 31 May 1979.



1911 Garrett steam traction engine after full restoration by M. Schofield and metals workshop staff.

history. The most important of these were Bert Hinkler's AVRO *Baby* and the wreck of Sir Charles Kingsford Smith's and Captain Bill Lancaster's *Southern Cross Minor*, recovered from the Sahara desert by a British expedition co-ordinated by Wixted (see Chapter 4). Sir Charles Kingsford Smith memorabilia were donated by his family, now resident in North America, and, escorted by Director Bartholomai, were flown to Australia by QANTAS.

The AVRO *Baby* G-EACQ, like his later AVRO *Avian*, had been damaged on landing—this time on a Newcastle beach, and Hinkler left it behind when he returned to England by ship in 1921. The aircraft had several owners in Australia—the last being a Mr J.J. Smith. In 1969 the assiduous Wixted eventually found Smith—albeit a not very distinctive name—through the owners of the Footscray house in which he had lived



Bringaree Indian, a Royal Worcester porcelain figure of 1888, modelled by Hadley. From the Ben Ronalds collection, donated to the museum by Mrs. A.M. Ronalds in memory of her husband, Ben.

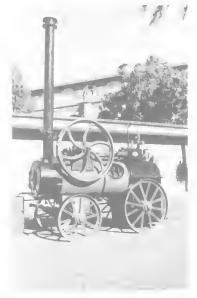
in 1930. Smith had the plane stored under a relative's house. Supported by Bert Hinkler's brother, Jack, Wixted persuaded him to donate the aircraft to the Queensland Museum. The government airline (TAA) through the Queensland manager, Ben Cochrane, undertook to transport the plane to Brisbane but no road haulier would undertake the job. No DC4 aircraft, which had suitably wide cargo doors, were in commission either. Then one was brought back into service — with a recertified crew — to provide aerial delivery of dairy products from Atherton. It was this plane that brought the AVRO Baby to Queensland on 2 March 1970. It was the only flight that DC4 made—the aerial dairy delivery never eventuated. The Baby was displayed by the Royal Flying Doctor Service at Archerfield aerodrome soon after its arrival in Brisbane. Then, beautifully restored by the Royal Queensland Aero Club—of which Hinkler had been a member—to commemorate the 50th anniversary of his 1921 flight, Jim Smith presented the plane to the museum at a ceremony on 26 May 1972. It is Smith's monogram that adorns the tail—and it was agreed that it should remain there, commemorating the 39 years that he had owned the Baby.

Among the many historical items that were acquired during the two decades from 1970 is the Ben Ronalds collection of over 800 pieces of ceramics and glassware, including nearly 250 pieces of Royal Worcester porcelain. This collection was donated by Mrs A.M. Ronalds in memory of her husband Ben whose hobby it had been over many years.

The history and technology section is now deeply involved with a new venture for the museum — the setting up of branch museums at various centres in the state. The first, WoodWorks, the Forestry and Timber Museum, a joint development with the Department of Forestry at the Gympie Forestry Centre, opened in 1984. It deals specifically with the history of forestry and the timber industry in Queensland and displays equipment and technology used in the early days. Proposals for future branch museums include the Cobb and Co. Museum of Animal Transport, at Toowoomba, which will provide a home for the extensive collection donated by the Bolton family; and a Printing Industry Museum in the old State Government Printing building in William Street, Brisbane. Under the Queensland Transport and Technology Centre Act 1984 administered by the premier, a centre was planned to collect and display recent transport, energy and mining technology at Coomera, south of Brisbane. Later, as a result of a decision to rationalise museum services, the Act was repealed as from October 1985 and responsibility for the future of the centre will be assumed by the museum. Thus, in the long term, the museum is to develop a specialist branch dealing with technology, at Coomera, on a site originally selected by another department.

While early policies to build up historical and technological collections were educational, the increase in the collections over the last 20 years is probably a result of the recognition of the museum's function to preserve an archive of artefacts. There is no doubt that community interest in its own history has also developed in recent years. Thus, by providing study and display collections on the history of settlement and the technology of Queensland, the museum can provide a deeper understanding of the past.

The section has an extensive range of responsibilities. For instance, in 1973 a temporary display on China, using articles from the museum collection, was followed by a display celebrating the 500th anniversary of the birth of Copernicus and later, a display of pottery. Public enquiries about routes and relics of early explorers, coins, ceramics, glass, weapons, shipwrecks, clocks, industrial machinery, transport, garments, uniforms,



The Ransomes Sims and Jefferies Portable Steam Engine of 1919 undergoing steam tests at the museum after restoration, 1978.



D.J. Robinson, curator of history and technology, in his office in the eastern end of the storage shed that also housed a large part of the collection as well as the metal workshop at the western end.





fabrics, musical instruments and more—often involving research—are daily answered. The diversity of objects, both in size and fabric, in the history and technology section's collections—from aircraft to abacus and ploughshares to lace pillowslips—has always posed problems of storage and display. From time to time, as the collections have swelled, temporary relief has been found by using storage space wherever possible—in the technology workshop and storage building in the museum grounds in the late 1960s; in the former art gallery section of the main building in 1975; in the old New Farm power station in 1980; and from 1982 in rented storage in the West End area 33.



WoodWorks, a branch of the Queensland Museum, operated in conjunction with the Forestry Department at Gympie.

That the history and technology section, with its remarkable spread of collecting interests and commensurate range of artefacts, should experience problems in preserving its collections in the Queensland climate and under primitive conditions of housing is self-evident. The storage of the collections—in a tin shed adjacent to the railway line in which summer temperatures soared and winter ones plummeted, and in every nook and cranny of the main museum building from the 'earth basement' to the galleries above the old concert hall—exacerbated the problems of saving old and often delicate objects. Accordingly, until the appointment of a conservator, N.H. Agnew, in 1980, it was the curator of history and technology who, perforce—to save his collections—had to develop expertise in conservation and methods of preservation. Indeed, before 1980, D.J. Robinson extended his offices in conservation to other sections of the museum, as well as advising the public on matters as diverse as saving grandmother's christening robe from decay and constructing a time capsule.



Erie mill engine being removed from display in 1984, for full restoration, to be used to drive the steam sawmill under construction at WoodWorks, Gympie.



Arrival at the museum of the remains of the *Republic* truck, donated by Gilltrap's Auto Museum, Kirra, for use as a source of spare parts for restoration of the museum's 1925 model 20 W.C. *Republic* – now on display as a working exhibit at *WoodWorks*, Gympie.



The branch museum to be opened in Toowoomba will celebrate the era before railways when animal transport provided the sole means of communication.



Cobb and Co. coach lent to the museum for the centenary of Queensland exhibition 1959, by W.R.F. Bolton of Toowoomba. The coach is part of the collection given to the museum by the Bolton family and will be exhibited in the Animal Transport Branch of the museum in Toowoomba.

When it was decided that the museum would become part of the Cultural Centre on the South Bank of the Brisbane River it was acknowledged that this site would not be the permanent home of technology nor, for that matter, of the growing maritime archaeological collections. The move to the new museum building in the Queensland Cultural Centre in 1986 is thus only one more step in the story of the state's technology collections.